

AMENDMENT TO THE SPECIFICATION

Please amend the summary as follows:

[0013] The problems identified above are in large part addressed by methods and arrangements for power reduction in links, such as transmitters and receivers, based upon global decisions such as the activity, data transmission frequency, communications media, and traffic type associated with links. ~~One embodiment provides a local link for reducing power consumption. The variable power link contemplates a link circuit to process data having multiple different data transmission characteristics, the link circuit being configurable to operate in multiple power modes, wherein at least two of the multiple power modes are associated with respective data transmission characteristics; and a local controller to receive activity assignments for the variable power link, wherein the activity assignments are related to data transmission characteristics, and to configure the link circuit to operate in one of the multiple power modes in respective response to a received activity assignment.~~

~~[0013.1] The embodiments above, wherein the variable power link comprises a transmitter core, the link circuit being a serialization circuit that is configurable to adjust a frequency of the data transmission.~~

~~[0014] Another embodiment provides an apparatus for reducing power consumption by a link. The apparatus contemplates a port utilization manager to track an availability of a port; forwarding logic to associate the port with a destination; and a global controller coupled with the forwarding logic to determine an activity for a link based upon an association between the link and the port and the availability of the port, the activity being related to a data transmission characteristic for data to transmit via a channel of the link, and to transmit a control signal to a local controller, wherein the control signal indicates a power mode for circuitry associated with the link and the data is associated with the destination.~~

[0014.1] — ~~The embodiments above further comprising a local controller, responsive to the control signal, to configure the circuitry associated with the link to operate in the power mode, wherein selection of the power mode is based upon the activity.~~

[0014.2] — ~~The embodiments above, wherein the local controller is adapted to change an operating frequency and an operating voltage for the circuitry based upon the power mode.~~

[0015] Another embodiment provides a method for reducing power consumption by multiple links communicatively interconnected to provide a path between an origin and a destination for a data transmission, wherein each of the multiple links comprise a transmitter communicatively coupled with a receiver via a data transmission medium. The method contemplates ~~determining an activity for the link based upon forwarding logic, the activity being related to a characteristic for a data transmission via a channel of the link; associating the activity with a power mode for the link, wherein the power mode is related to the characteristic; and configuring circuitry associated with the link to operate in the power mode to process the data transmission~~ determining ports of the multiple links to transmit the data transmission between the origin to the destination; determining an activity assignment for the ports of the multiple links based upon forwarding logic, wherein determining the activity assignment comprises determining the data frequency, traffic type, and medium type for the data transmission, the activity assignment being related to transmitting the data transmission from the origin to the destination through the multiple links with a characteristics for the multiple links to accommodate; associating the activity with a power mode for the multiple links, the power mode selected to accommodate the characteristics of the data transmission; and configuring circuitry of transmitters and receivers of ports of the multiple links on the path to accommodate the characteristics by communicating the power mode to local link controls at each of the transmitters and receivers of the multiple links.